

AMENDMENTS TO THE SPECIFICATION

Page 1, after the title and before the first paragraph of the specification, please insert the following heading and paragraph as follows:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a National Stage of International Application No. PCT/EP05/50888, filed March 1, 2005, which claims benefit of U.S. Provisional Application No. 60/549,219, filed March 2, 2004 and U.S. Provisional Application No. 60/623,481, filed October 29, 2004, all of which are incorporated by reference in their entirety.

Replace the paragraph on page 1, lines 26-30, with the following:

With more therapeutic options becoming available over time, resistance testing is expected to play an important role in the management and treatment of disease and the development of individualized treatment regimes [see e.g. ~~Haulbrich~~Haubrich et al. JAIDS, 2001, 26S1, S51-S59].

Replace the paragraph on page 7, lines 15-25, with the following:

In a preferred embodiment, the PSS may be calculated based on preliminary clinical cut-offs which are determined as described. The concept of PSS is discussed in detail by DeGruttola et al. (Antiviral Therapy 2000; 5:41-48). In addition, the concept of continuous PSS as a variation of PSS is discussed by ~~[[Bosch]]~~Allison et al. (AIDS 2003, 17:1-9); Katzenstein et al. (AIDS 2003; 17:821-830); and Haubrich et al. ("Delavirdine Hypersusceptibility (DLV HS): Virological Response and Phenotypic Cut-Points--Results from ACTG 359"; 11th Conference on Retroviruses and Opportunistic Infections held on 8-11 Feb. 2004 in San Francisco, Calif.,

USA). The PSS may be determined by an iterative process such that the cut-off value is refined to a constant value. In subsequent iterations of the model, PSS scores based on preliminary clinical cut-offs defined in the first iteration of the model may be utilized.

Replace the paragraph on page 7, line 37 through page 8, lines 6, with the following:
For example, prediction of baseline fold change resistance may exploit rules-based or other less direct systems of determining the drug resistance phenotype of a pathogen. An example of a less direct system is the Virtual Phenotype (Virco, Inc.; PCT/EP01/04445WO 01/79540). Prediction of baseline fold change resistance may alternatively use other systems for determining phenotype from genotype information, such as neural networks that determine the drug resistance phenotype of a pathogen based on its genotypic information (see, for example, U.S. patent 7,058,616 application Ser. No. 09/589,167; PCT/EP01/06360WO 01/95230). The neural network may be used to identify mutation(s) or mutation patterns that confer resistance to a drug and defines the genetic basis of drug resistance.

Replace the paragraph on page 21, lines 6-8, with the following:

In one embodiment the effect of drugs on HCV towards therapy may be determined using techniques such as described by Rice (WO 9710831097/08310, WO 98/39031) and Barthenschlager (EP 1043399).